

12-month finding for the California Spotted Owl: a brief summary

May 22, 2006



ESA 5-Factor Analysis as presented in the petition to list the owl:

- **A. Present or threatened destruction, modification...**
 - Wildfire, fuels reduction, timber harvest (Fed and private)
 - Tree mortality, development
- **B. Overutilization for Commercial, Recreational...**
 - No threats
- **C. Disease or Predation**
 - West Nile Virus, Predation
- **D. Inadequacy of Existing Regulatory Mechanisms**
 - SNFPA, So. CA Land Management Plans
 - MBTA, Forest Practice Rules, CDFG regs, CEQA
- **E. Other Natural and Man-made Factors**
 - Barred owl
 - Weather

The Interagency Science Team

The Service convened an interagency Science Team as part of the decision-making process for this 12-month finding.

Members of the science team were experts in forest ecology, spotted owl biology, fire ecology, and forest resource management. The team had nearly 200 years of combined experience in these fields.

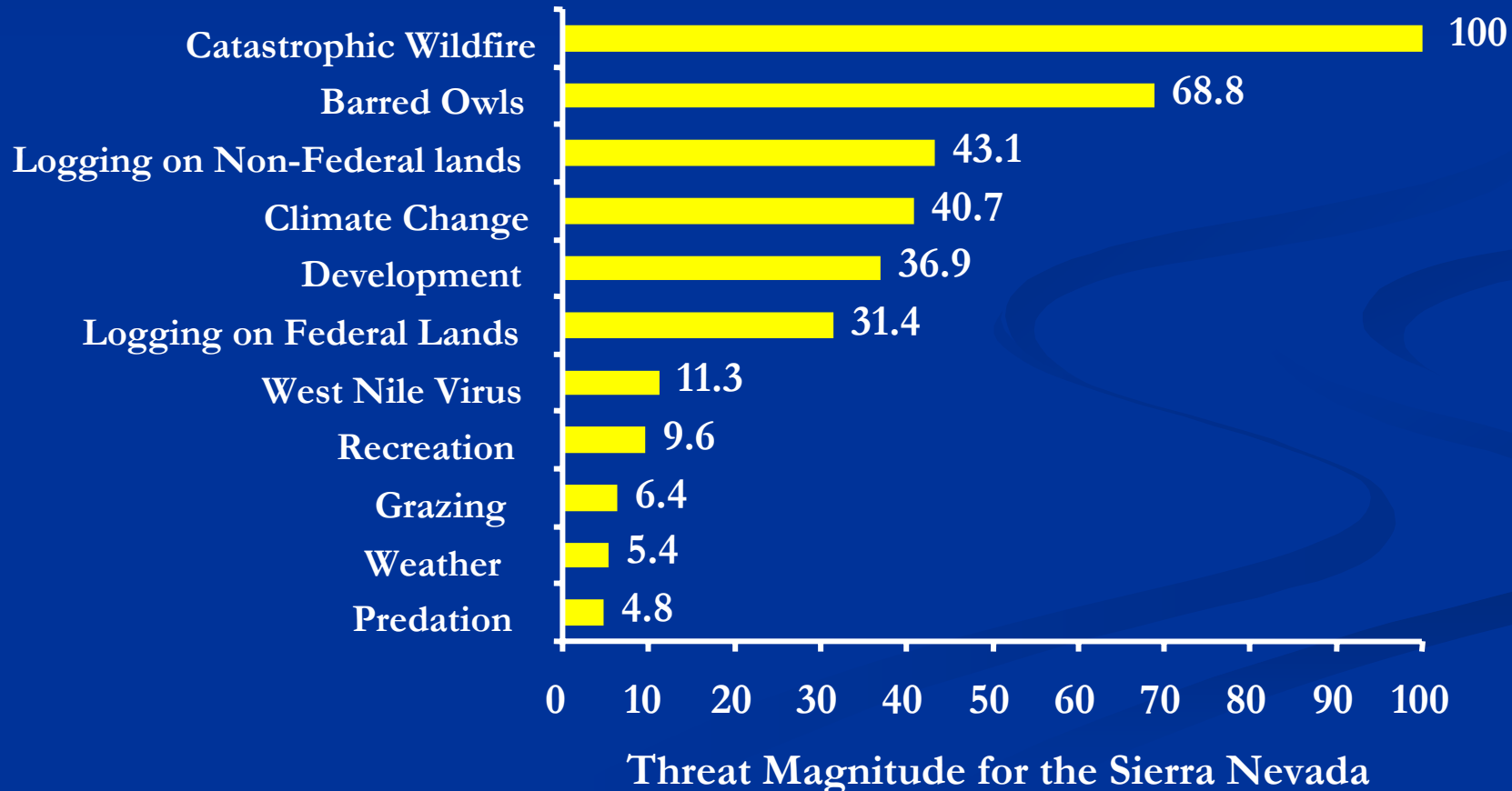
This eight-member team was comprised of biologists from the Service (2), the U.S. Forest Service Pacific Southwest Research Station (2), California Department of Fish and Game (2), California Department of Forestry and Fire Protection (1), and U.S. Geological Survey (1).

The Service presented to the Science Team information concerning possible threats to owls, and Science Team members individually ranked various threats relative to the risk of extinction of the owl.

Results of that exercise are on the next slide.

Factor A--Catastrophic Wildfire: the greatest threat

The Science Team was asked to rank the below factors as they relate to risk of extinction for the California spotted owl. The rankings were purely relative where 0 represented the least influence, 100 the greatest influence, and values between 0 and 100 represented intermediate influence. Wildfire was clearly the greatest threat to the owl.



Factor A: Wildfire in Sierras

- 1,300,000 forest acres burned in the past 30 years
- FS estimates that 1,200,000 forest acres (11% of forests) will burn in wildfires during next 20 years
- 90 CSO Protected Activity (generally nesting) Centers (7% of 1,321 total) likely to be lost to wildfire during the next 20 years unless fuels reduction treatments occur. Such treatments will reduce the number of Protected Activity Centers that would otherwise be lost to wildfire.

Factor A: Fuels reduction in the Sierras

- During the 20 years of the Sierra Nevada Forest Plan Amendment (SNFPA), FS plans to treat, using fire and/or mechanical:
 - 2.4 million acres (22%) of forest area
 - 655,000 acres (13%) of suitable habitat
 - 4.3% (17,000 acres) of all PAC acreage

Treatments are tailored to protect CSO...

- Large trees protected (≥ 30 in. dbh)
- Canopy cover maintained (usually ≥ 40 -50%)
- Snags and downed wood are retained

Factor A: Federal timber harvest

- Harvest has declined substantially in past 10-15 years
 - Harvest decreased 80%: 450 million board feet (1993) to 86 million board feet (2004)
- Sierras: SNFPA has most actions designed to make fuels reduction the primary purpose
- Southern CA: virtually all from fuels treatments and from salvage sales

Factor A: Private land timber harvest

- Private timberlands comprise ~30% of suitable habitat in Sierras
- SPI has the most CSO sites on private land (200) and implements protective measures:
 - They use CDFG database (THP)
 - They conduct walk-through surveys; submit annual reports
 - Timber units with nesting spotted owls are not harvested
- During the next 100 years, SPI estimates that nesting habitat will more than double on their land

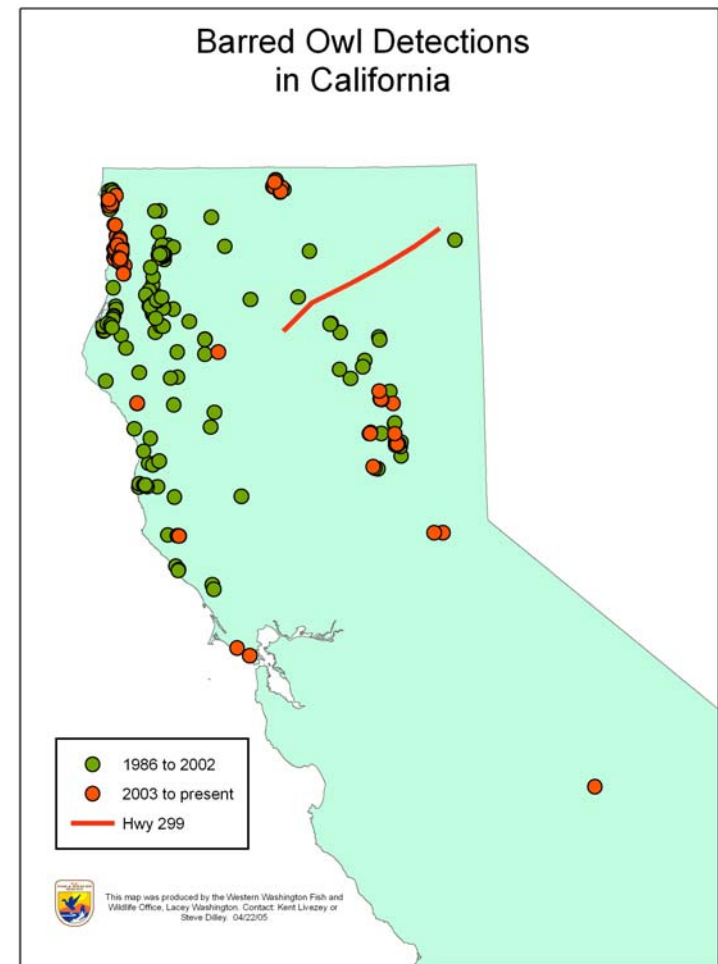
Factors B, C, & D:

- **Factor B** – Overutilization for commercial or other purposes
 - Not applicable
- **Factor C** – Disease or Predation
 - West Nile Virus, Predation: No evidence of adverse impacts
- **Factor D** -- Inadequacy of Existing Regulatory Mechanisms
 - SNFPA and southern CA Land Management Plans consider CSO habitat while reducing wildfire risk (see Factor A)

Factor E: Other Natural or Man-made Factors

■ Barred owls

- 60 detections in CSO range (as of Apr/05)
- None in southern CA
- Rate of barred owl spread is very slow compared to other areas occupied by barred owls



Recent Study Results on Population Trend

A study (meta-analysis) was completed this past winter which assessed population trends of four study areas in the Sierra Nevada

- Adult owl survival increased over the past 16 years
- No strong evidence was found for decreasing population trends on any of the study areas.
- Statistically, the four populations were stationary.

Conclusion: Not Warranted

- **A. Present or threatened destruction, modification...**
 - Wildfire is the primary threat; Fuels treatment reduces that threat
 - Fuels treatment harvest seeks to maintain habitat
 - Private lands (SPI) will more than double nesting habitat over time
 - Modeling shows owl populations to be stationary (stable)
 - Survival of owls in Sierras is increasing
- **B. Overutilization for Commercial, Recreational...**
 - Not an issue
- **C. Disease or Predation**
 - West Nile Virus, Predation: No evidence of adverse impacts
- **D. Inadequacy of Existing Regulatory Mechanisms**
 - SNFPA, So. CA Land Management Plans: Seek to reduce wildfire risk
- **E. Other Natural and Man-made Factors**
 - Barred owl only sparsely distributed in Sierras and not present in SoCal